

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/004944

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60R16/02 H04L12/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60R H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 156 151 A (BORRONI MARIO) 22 May 1979 (1979-05-22) column 1, line 6 - line 19 column 2, line 49 - column 3, line 21 column 4, line 6 - line 34 abstract; figures 1-10 ----- -/--	1-11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

19 July 2004

Date of mailing of the international search report

02/08/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JW SPECKS, A RAJNAK: "LIN Protocol, development tools and software interfaces for local interconnect networks in vehicles" 'Online! XP002287370 Retrieved from the Internet: URL: http://www.lin-subbus.org/frontend/kunden-pdf/w_specks_lin_baden-baden_paper.pdf > 'retrieved on 2000-10-06! page 4, paragraph 2 page 6, paragraph 4 - page 7, paragraph 1 page 23, paragraph 3; figures 4,19 abstract	1-11
X	HANS-CHRISTIAN VON DER WENSE: "Introduction to LIN" 'Online! XP002287371 Retrieved from the Internet: URL: http://www.lin-subbus.org/frontend/kunden-pdf/introduction_to_lin.pdf > 'retrieved on 2000-03-30! figures 6-8,15	1-11
X	US 5 990 573 A (GRANITZ RICHARD FRANCIS ET AL) 23 November 1999 (1999-11-23)	1
A	column 2, line 24 - column 3, line 12; figures 1-8 abstract	2-11
X	US 6 420 797 B1 (ALBANESE RONALD P ET AL) 16 July 2002 (2002-07-16)	1
A	column 2, line 66 - column 3, line 64; figures 1-6 abstract	2-11
A	US 2002/065594 A1 (SQUIRES BRADLEY C ET AL) 30 May 2002 (2002-05-30) abstract; figures 1-23	1-11
A	DE 197 39 410 C (VOLKSWAGEN BORDNETZE GMBH) 17 December 1998 (1998-12-17) abstract; figures 1-3	1-11
A	US 5 670 845 A (BRASSINGTON DAVID ET AL) 23 September 1997 (1997-09-23) abstract; figures 1-3	1-11
A	US 5 508 689 A (DEVLIN SHAUN S ET AL) 16 April 1996 (1996-04-16) abstract; figures 1-7	1-11
A	US 6 485 155 B1 (DUMONT DANIEL ET AL) 26 November 2002 (2002-11-26) abstract; figures 1-7	1-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/004944

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4156151	A	22-05-1979	IT 1061720 B DE 2724759 A1 ES 459448 A1 FR 2353412 A1 GB 1584581 A JP 53017884 A JP 59074149 U SE 415338 B SE 7706402 A	30-04-1983 08-12-1977 16-05-1978 30-12-1977 11-02-1981 18-02-1978 19-05-1984 29-09-1980 05-12-1977
US 5990573	A	23-11-1999	NONE	
US 6420797	B1	16-07-2002	NONE	
US 2002065594	A1	30-05-2002	US 6421593 B1 US 2003130765 A1 US 2003158640 A1 US 2004024502 A1 US 2003158638 A1 US 2003158635 A1 US 2003171854 A1 US 2003163228 A1 US 2003163229 A1 US 2003163230 A1 US 2004002794 A1 US 2004019414 A1 US 2004039510 A1	16-07-2002 10-07-2003 21-08-2003 05-02-2004 21-08-2003 21-08-2003 11-09-2003 28-08-2003 28-08-2003 28-08-2003 01-01-2004 29-01-2004 26-02-2004
DE 19739410	C	17-12-1998	DE 19739410 C1 FR 2767761 A1 GB 2329082 A , B	17-12-1998 05-03-1999 10-03-1999
US 5670845	A	23-09-1997	AU 3958393 A CA 2133847 A1 DE 69311328 D1 DE 69311328 T2 EP 0634983 A1 ES 2105247 T3 WO 9321035 A1 JP 3470808 B2 JP 7508693 T	18-11-1993 28-10-1993 10-07-1997 29-01-1998 25-01-1995 16-10-1997 28-10-1993 25-11-2003 28-09-1995
US 5508689	A	16-04-1996	DE 4392671 C2 DE 4392671 T0 WO 9325412 A1 GB 2282941 A , B JP 7507909 T	21-06-2000 01-06-1995 23-12-1993 19-04-1995 31-08-1995
US 6485155	B1	09-01-2003	US 2003007266 A1 EP 1412801 A1 WO 03014802 A1	09-01-2003 28-04-2004 20-02-2003